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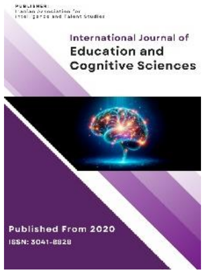

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The Impact of ERP Utilization in the Educational System on Enhancing Educational Quality Considering the Mediating Role of Technology Acceptance

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A B S T R A C T

Purpose: The primary objective of this study is to examine the impact of ERP utilization in the educational system on enhancing educational quality, considering the mediating role of technology acceptance.

Methods and Materials: The statistical population of this study includes university professors and university staff at the expert level and above. Since the population was indeterminate, a sample of 384 individuals was determined based on Krejcie and Morgan's table. The questionnaire was designed electronically, and its link was sent to the members of the statistical population. A researcher-made questionnaire was used in this study. Therefore, to determine its validity, the Content Validity Index (CVI) was employed. The results indicated that all 16 questionnaire items were approved by experts. Additionally, the reliability of the questionnaire was calculated using Cronbach's alpha and was confirmed. The values were as follows: educational system (0.910), technology acceptance (0.891), and educational quality enhancement (0.793). Descriptive statistics were analyzed using SPSS 24, and structural equation modeling (SEM) was conducted using Smart-PLS 3.

Findings: The results demonstrated that the hypothesis "ERP utilization in the educational system" has a significant impact on "educational quality enhancement." Additionally, "ERP utilization in the educational system" influences "technology acceptance." Moreover, "technology acceptance" affects "educational quality enhancement." Finally, "ERP utilization in the educational system" indirectly impacts "educational quality enhancement" through "technology acceptance."

Conclusion: Based on the findings, it can be concluded that ERP utilization in the educational system significantly enhances educational quality, considering the mediating role of technology acceptance.

Keywords: *Technology Acceptance, Educational Quality, ERP.*

1. Introduction

In recent decades, information technology has become deeply intertwined with all aspects of our lives, particularly in professional and occupational domains. The application of information technology in various fields and the rapid growth of computer usage in organizations have highlighted the importance of examining the factors influencing the acceptance and rejection of information technology in organizations. The utilization of information and communication technology enhances efficiency, reduces costs, and increases the accessibility of public services for institutions and businesses, thereby facilitating operations (Abdelfattah et al., 2024; Bedman, 2013). Consequently, the adoption and implementation of information technology have attracted significant research attention, with expectations that it will continue to be one of the most critical challenges in organizational transformation in the future (Abdelfattah et al., 2024; Ajmi, 2024). However, merely implementing a technology is insufficient to reap its benefits; rather, the technology must be actively used by end-users. If users fail to accept and adopt new technology, investments in that domain will ultimately be futile (Bibi, 2024; Gashi et al., 2024).

In recent years, the number of higher education institutions worldwide has significantly increased. Given the rising demand for higher education and the competitive landscape among universities striving for a superior position, issues related to the quality of higher education and its assessment have gained considerable attention. In many countries, the higher education system is responsible for training specialized human resources required for various sectors, including science, technology, industry, and agriculture. Evidence suggests that this system can fulfill its responsibilities and objectives effectively only if it maintains an optimal level of educational quality. Otherwise, the expansion of higher education without a focus on quality will lead to unmet expectations, academic failure, student dropout, scientific dependence, brain drain, and a lack of entrepreneurship in production and industry (Ghalavand, 2024; Poon et al., 2024).

Universities exert a broad influence on other institutions and sectors of society, including economic, social, cultural, and political domains. On the one hand, universities prepare society by training specialized individuals, managers, and leaders, and on the other hand, they contribute to the expansion of human knowledge by fostering intellectual abilities, creativity, and innovation. Additionally, through the analysis of various challenges and contemporary issues, universities not only address problems and rectify deficiencies but also promote progress by strengthening exploration, innovation, creativity, and a critical mindset among educated individuals. This, in turn, enhances the overall tools and mechanisms of societal advancement (Ahmadian Chashmi et al., 2020).

In developing countries, higher education is considered an essential tool for development and a means of improving individuals' quality of life. As a result, improving the quality of higher education has become a strategic priority for governments, drawing significant attention from stakeholders over the past few decades (Najafi Dolatabad et al., 2019).

Assessing and managing quality in higher education is a controversial subject that has led to the emergence of numerous methods and approaches. The increasing volume and diversity of higher education activities have intensified the focus on quality. This focus has enhanced understanding in key educational areas; however, there remains a need for a more integrated connection between the various elements of the educational process (Tsiligiris & Hill, 2021). The rapid advancement of information dissemination in the latter half of the 20th century has swiftly integrated itself into daily life, encompassing all major human activities in a short period. The education system has not been excluded from these processes, incorporating numerous innovations that facilitate previously unattainable educational experiences in various fields. Today, e-learning is one of the most effective and modern teaching methods, with its popularity growing rapidly worldwide. In the fast-paced modern lifestyle, thousands of individuals are utilizing distance learning to acquire comprehensive knowledge and enhance their skills to meet international educational quality standards (Drozdova & Guseva, 2017).

One of the key benefits of Enterprise Resource Planning (ERP) systems for higher education institutions includes improved access to information for institutional planning and management, enhanced services for faculty, students, and staff, reduced business risks, increased revenue, and lower costs due to improved efficiency. An ERP system in higher education institutions refers to the implementation of commercial solutions to achieve both administrative and academic objectives. Administrative functions include human resources, accounting, payroll, and billing, while academic functions cover admissions, enrollment, and all aspects related to student records. The goal of implementing ERP systems in higher education institutions is to integrate

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various administrative functions into a more efficient and cost-effective approach to gaining strategic advantages. The integration of administrative functions in higher education enables the consolidation of student management, human resource management, facilities management, and financial systems, which were previously operated independently (Aldossari & Mokhtar, 2020; Makokha et al., 2013; Mukred et al., 2022).

Today, the rapid advancement of information and communication technology has led organizations to allocate substantial portions of their resources to IT investments annually. The application of IT governance and ERP systems is particularly evident in knowledge-based organizations such as universities. Universities have played a decisive role in the transition from an industrial society to an information society. Given their crucial role in knowledge production and dissemination, universities have been significantly influenced by information technology. However, research indicates that IT governance in universities has not been effectively implemented. As a result, universities face numerous challenges and weaknesses in enterprise resource planning. Faculty, staff, and students hold positive perceptions of IT governance, yet it has not been adequately prioritized, suggesting that significant progress is still needed (Jowhari et al., 2019). Moreover, ERP systems have not been properly implemented in universities. Universities must be able to study staff behavior and establish effective relationships with students. Additionally, internal university departments must function in a fully integrated and coordinated manner to deliver successful educational and service-oriented outcomes. However, such integration has not been realized. Implementing ERP systems could address these challenges (Hardin-Ramanan et al., 2018).

One of the most recent applications of ERP systems is their implementation in higher education. Traditionally, institutions and universities have been reluctant to adopt technologies such as ERP in their systems. Despite this reluctance, it is evident that even higher education institutions must embrace modern technologies to enhance educational quality. One of the key advantages of ERP in higher education is the improved understanding of how and when to develop educational services, curriculum development, and the expansion of e-learning capabilities. Furthermore, ERP adoption enhances resource management capabilities, including budgeting, staffing, faculty management, and decision-making processes. The effectiveness of the Technology Acceptance Model (TAM) in improving educational quality through ERP implementation in Iranian higher education is attributed to the numerous advantages offered by this IT system. This model helps Iranian universities and higher education institutions enhance their administrative and educational processes, thereby improving educational quality. Through ERP systems, universities can experience improvements in various service areas, including enrollment, class scheduling, course offerings, student evaluations, financial management, information accessibility, and reporting. Therefore, the adoption of ERP is a crucial strategy for improving educational quality in Iranian higher education. Consequently, the primary research question is:

Does ERP utilization in the educational system enhance educational quality, considering the mediating role of technology acceptance?

Hypothesis 1: "ERP utilization in the educational system" has a significant impact on "educational quality enhancement."

Hypothesis 2: "ERP utilization in the educational system" has a significant impact on "technology acceptance."

Hypothesis 3: "Technology acceptance" has a significant impact on "educational quality enhancement."

Hypothesis 4: "ERP utilization in the educational system" indirectly influences "educational quality enhancement" through "technology acceptance."

2. Methods and Materials

This study is applied in terms of its objective, descriptive-survey in terms of method, and causal in terms of the relationships between the studied variables.

The statistical population of this study consists of university professors and university staff at the expert level and above. Since the population was indeterminate, a sample of 384 individuals was determined based on Krejcie and Morgan's table. The questionnaire was designed electronically, and its link was sent to the members of the statistical population. After collecting approximately 450 responses, the data were refined, and incomplete questionnaires were removed, leaving 384 valid responses for analysis.

A researcher-made questionnaire was used in this study. To determine its validity, the Content Validity Index (CVI) was employed. The results indicated that all 16 questionnaire items were approved by experts. Additionally, the reliability of the questionnaire was calculated using Cronbach's alpha and was confirmed with the following values: Educational

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System (0.910), Technology Acceptance (0.891), and Educational Quality Enhancement (0.793). Descriptive statistics were analyzed using SPSS 24, and structural equation modeling (SEM) was conducted using Smart-PLS 3.

3. Findings and Results

A total of 384 participants took part in this study, of whom 54.9% were male and 45.1% were female. In terms of age distribution, 14.8% of respondents were under 30 years old, 49.2% were between 31 and 40 years old, 23.4% were between 41 and 50 years old, and 12.5% were over 50 years old. Regarding educational background, 15.1% of respondents held a bachelor's degree, 44.8% had a master's degree, and 40.1% had a doctoral degree. Concerning work experience, 18% had less than 10 years of experience, 44.5% had between 11 and 20 years, and 37.5% had more than 20 years of experience.

This study employed the Partial Least Squares (PLS) method, which consists of two main stages: (1) assessing the fit of the measurement model, structural model, and overall model, and (2) testing the relationships among constructs. Each stage includes specific indicators that need to be examined. The following sections evaluate the research model in three domains: measurement model fit, structural model fit, and overall model fit.

The measurement model fit includes the following indices: Cronbach's alpha, composite reliability (CR), factor loadings and their significance, average variance extracted (AVE), and the Fornell-Larcker matrix.

Since Cronbach's alpha is a traditional measure of construct reliability, the PLS method employs a more modern criterion called composite reliability (CR). The advantage of composite reliability over Cronbach's alpha is that it calculates construct reliability based on the correlation between constructs rather than as an absolute measure. Consequently, both metrics are used in PLS to ensure a more accurate assessment of reliability. A CR value greater than 0.7 for any construct indicates appropriate internal consistency in the measurement model.

Factor loadings are determined by calculating the correlation between an indicator and its corresponding construct. If a factor loading is equal to or greater than 0.4, it suggests that the variance shared between the construct and its indicators exceeds the measurement error variance, thus supporting the reliability of the measurement model. Some researchers, such as Hair et al. (2010), recommend using a threshold of 0.5 as the criterion for factor loadings.

The third measure used to assess measurement model fit in PLS is convergent validity. The average variance extracted (AVE) represents the mean variance shared between a construct and its indicators. Higher AVE values indicate a stronger fit. Fornell and Larcker (1981) introduced AVE as a criterion for assessing convergent validity, stating that an AVE value greater than 0.5 indicates acceptable convergent validity.

Table 1 presents the factor loadings, Cronbach's alpha, composite reliability, and AVE for each construct.

Table 1

Factor Loadings, Cronbach's Alpha, Composite Reliability, and Average Variance Extracted (AVE)

Variables	Indicators	Factor Loadings	Cronbach's Alpha	CR	AVE
ERP Utilization in the Educational System	ERP1	0.877	0.910	0.929	0.651
	ERP2	0.814			
	ERP3	0.747			
	ERP4	0.801			
	ERP5	0.815			
	ERP6	0.754			
	ERP7	0.833			
Technology Acceptance	TA1	0.847	0.891	0.917	0.647
	TA2	0.788			
	TA3	0.820			
	TA4	0.757			
	TA5	0.805			
	TA6	0.807			
Educational Quality Enhancement	IEQ1	0.840	0.793	0.879	0.707
	IEQ2	0.847			
	IEQ3	0.836			

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As shown in Table 1, all factor loadings exceed the 0.5 threshold and are deemed acceptable. The Cronbach's alpha values for all research variables exceed 0.7, confirming satisfactory reliability. The composite reliability (CR) values for all variables are also above 0.7, further supporting the reliability of the constructs. The AVE values for all research variables exceed 0.5, indicating acceptable convergent validity.

Discriminant validity assesses whether a construct is more strongly related to its indicators than to other constructs in the model. Fornell and Larcker (1981) propose that discriminant validity is acceptable when the AVE of each construct is greater than the shared variance between that construct and other constructs (i.e., the square of the correlation coefficient between constructs). In PLS, this is examined using a matrix in which each cell contains the correlation coefficients between constructs and the square roots of their AVE values. A model exhibits acceptable discriminant validity if the values on the diagonal (square roots of AVE) are greater than the corresponding off-diagonal values.

Table 2 presents the Fornell-Larcker discriminant validity matrix.

Table 2

Discriminant Validity (Fornell-Larcker Criterion)

Variables	Educational Quality Enhancement	ERP Utilization in the Educational System	Technology Acceptance
Educational Quality Enhancement	0.841		
ERP Utilization in the Educational System	0.564	0.807	
Technology Acceptance	0.585	0.605	0.805

As observed in Table 2, the square root of AVE values on the diagonal is greater than the corresponding correlation coefficients, indicating acceptable discriminant validity for the model.

The structural model fit is assessed using the following indices: t-values, coefficient of determination (R^2), effect size (f^2), and predictive relevance (Q^2).

The t-values are the primary criterion for evaluating relationships between constructs in the model. A t-value greater than 1.96 indicates a significant relationship between constructs, thereby supporting the research hypotheses. However, while t-values confirm the existence of relationships, they do not measure the strength of these relationships. Figure 1 presents the structural model with standardized path coefficients, and Figure 2 illustrates the model with t-values.

The coefficient of determination (R^2) connects the measurement model to the structural model and indicates the extent to which an exogenous variable influences an endogenous variable. R^2 values are only reported for endogenous variables. A higher R^2 value suggests a better-fitting model. Chin (1998) categorizes R^2 values as follows: 0.19 (weak), 0.33 (moderate), and 0.67 (strong).

The predictive relevance (Q^2) criterion evaluates the model's ability to predict indicators of endogenous constructs. If $Q^2 = 0$, it suggests that the relationships between constructs in the model are not well defined, and the model requires revision. Henseler et al. (2009) classify Q^2 values as follows: 0.02 (weak predictive power), 0.15 (moderate predictive power), and 0.35 (strong predictive power).

Table 3 presents R^2 and Q^2 values for the endogenous constructs, indicating an acceptable structural model fit.

Table 3

R^2 and Q^2 Values for Endogenous Variables in the Model

Variables	R^2	Q^2
Educational Quality Enhancement	0.412	0.285
Technology Acceptance	0.366	0.234

The fourth criterion for evaluating the structural model is the effect size (f^2). Cohen (1988) introduced the effect size measure to determine the strength of relationships between latent variables in the model. The thresholds of 0.02, 0.15,

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and 0.35 indicate small, medium, and large effect sizes, respectively. Table 4 presents the f² effect size values, indicating an acceptable structural model fit based on this criterion.

Table 4

f² Effect Size Coefficients

Independent Variable	Dependent Variable	f²
ERP Utilization in the Educational System	Educational Quality Enhancement	0.119
	Technology Acceptance	0.577
Technology Acceptance	Educational Quality Enhancement	0.159

To evaluate the overall model fit, which assesses both the measurement and structural models, the Goodness of Fit (GOF) index is used. Wetzels et al. (2009) proposed 0.01, 0.25, and 0.36 as weak, moderate, and strong GOF values, respectively. The findings showed a GOF value of 0.509, which indicates an acceptable overall model fit.

Following the assessment of the measurement, structural, and overall model fits, the next step in PLS data analysis is testing the relationships between variables. The standardized path coefficients and t-values are examined. To confirm a hypothesis, the t-value must be equal to or greater than 1.96; otherwise, the hypothesis is rejected.

Hypothesis 1: "ERP Utilization in the Educational System" Positively Affects "Educational Quality Enhancement"

The results related to Hypothesis 1 are presented in Table 5.

Table 5

t-Values and Standardized Path Coefficient for Hypothesis 1

Hypothesis 1	Path Coefficient (B)	t-Value	Significance Level	Result
ERP Utilization in the Educational System → Educational Quality Enhancement	0.332	5.453	0.001	Confirmed

The analysis of the effect of ERP Utilization in the Educational System on Educational Quality Enhancement in the above table shows that the path coefficient is 0.332. Given that the t-value is 5.453 (greater than 1.96) and the significance level is less than 0.05, it can be concluded that this path is statistically significant at a 0.05 error level. This means that ERP Utilization in the Educational System has a positive and significant impact on Educational Quality Enhancement. An increase of one standard deviation in ERP Utilization in the Educational System leads to an increase of 0.332 standard deviations in Educational Quality Enhancement. Therefore, Hypothesis 1 is confirmed with a 95% confidence level.

Hypothesis 2: "ERP Utilization in the Educational System" Positively Affects "Technology Acceptance"

The results related to Hypothesis 2 are presented in the following:

Table 6

t-Values and Standardized Path Coefficient for Hypothesis 2

Hypothesis 2	Path Coefficient (B)	t-Value	Significance Level	Result
ERP Utilization in the Educational System → Technology Acceptance	0.605	16.071	0.001	Confirmed

The analysis of the effect of ERP Utilization in the Educational System on Technology Acceptance shows that the path coefficient is 0.605. Since the t-value is 16.071 (greater than 1.96) and the significance level is less than

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0.05, it can be concluded that this path is statistically significant at a 0.05 error level. This means that ERP Utilization in the Educational System has a positive and significant impact on Technology Acceptance. An increase of one standard deviation in ERP Utilization in the Educational System leads to an increase of 0.605 standard deviations in Technology Acceptance. Therefore, Hypothesis 2 is confirmed with a 95% confidence level.

Hypothesis 3: "Technology Acceptance" Positively Affects "Educational Quality Enhancement"

The results related to Hypothesis 3 are presented in the following:

Table 7

t-Values and Standardized Path Coefficient for Hypothesis 3

Hypothesis 3	Path Coefficient (B)	t-Value	Significance Level	Result
Technology Acceptance → Educational Quality Enhancement	0.384	6.623	0.001	Confirmed

The analysis of the effect of Technology Acceptance on Educational Quality Enhancement shows that the path coefficient is 0.384. Since the t-value is 6.623 (greater than 1.96) and the significance level is less than 0.05, it can be concluded that this path is statistically significant at a 0.05 error level. This means that Technology Acceptance has a positive and significant impact on Educational Quality Enhancement. An increase of one standard deviation in Technology Acceptance leads to an increase of 0.384 standard deviations in Educational Quality Enhancement. Therefore, Hypothesis 3 is confirmed with a 95% confidence level.

Hypothesis 4: "ERP Utilization in the Educational System" Indirectly Affects "Educational Quality Enhancement" Through "Technology Acceptance"

To test Hypothesis 4, two pathways were examined: (1) the effect of ERP Utilization in the Educational System on Technology Acceptance and (2) the effect of Technology Acceptance on Educational Quality Enhancement. If both pathways are significant, the mediation effect is confirmed:

Table 8

Mediation Analysis for Hypothesis 4

Paths	Standardized Path Coefficient	t-Value	Significance Level	Result
ERP Utilization in the Educational System → Technology Acceptance	0.605	16.071	0.001	Confirmed
Technology Acceptance → Educational Quality Enhancement	0.384	6.623	0.001	Confirmed

To further validate the mediation effect, the Sobel test was conducted.

Table 9

Sobel Test Results

Direct Effect	Indirect Effect	Total Effect	Sobel Test Statistic	Significance Level
-	0.232	0.232	6.123	0.001

The Sobel test statistic (6.123) is greater than 1.96, and the significance level (0.001) is below 0.05, confirming the mediation effect. Therefore, Technology Acceptance acts as a mediating variable in the relationship between ERP Utilization in the Educational System and Educational Quality Enhancement. Hypothesis 4 is confirmed with a 95% confidence level.

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Figure 1

Model with Factor Loadings

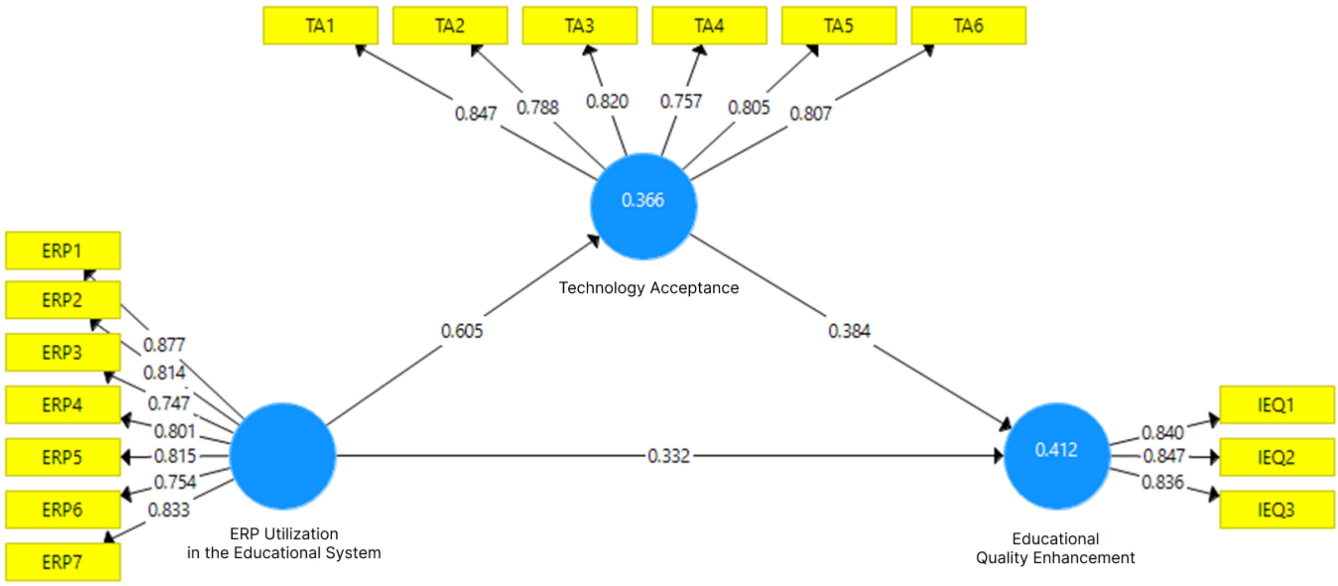
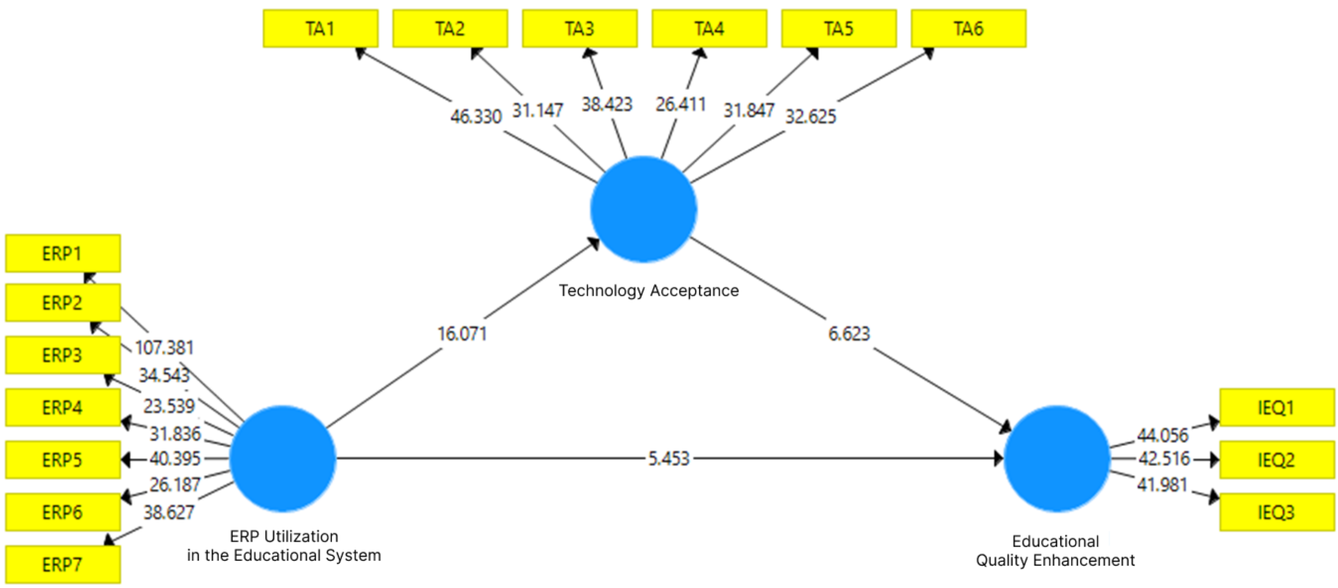


Figure 2

Model with T-Values



4. Discussion and Conclusion

The analysis of the first hypothesis revealed that the effect coefficient of ERP utilization in the educational system on educational quality enhancement was estimated at 0.332. Given that the t-value (5.453) is greater than 1.96 and the significance level is less than 0.05, it can be concluded that Hypothesis 1 is confirmed with a 95% confidence level. ERP utilization in the educational system positively affects educational quality enhancement by enabling quick and easy access to educational information and data, facilitating better planning and management of educational processes, and improving student performance assessment. Furthermore, ERP allows centralized access to student, faculty, and staff information, streamlining various administrative processes such as registration, student admissions, class scheduling,

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exams, and student services. Additionally, ERP reduces potential errors in educational processes and enhances communication between faculty and students. Overall, ERP utilization leads to improved performance and higher educational quality.

The analysis of the second hypothesis indicated that the effect coefficient of ERP utilization in the educational system on technology acceptance was estimated at 0.605. Since the t-value (16.071) exceeds 1.96 and the significance level is below 0.05, Hypothesis 2 is confirmed with a 95% confidence level. ERP implementation in the educational system improves communication among students, faculty, and administrators, which in turn fosters technology acceptance. In general, ERP utilization enhances technology acceptance among students, faculty, and administrators, thereby improving educational quality and learning outcomes.

The analysis of the third hypothesis showed that the effect coefficient of technology acceptance on educational quality enhancement was estimated at 0.384. Given that the t-value (6.623) is greater than 1.96 and the significance level is below 0.05, Hypothesis 3 is confirmed with a 95% confidence level. Technology acceptance, including ERP, provides fast and easy access to educational data, improves the planning and management of educational activities, and enhances student performance evaluation. Moreover, ERP centralizes student, faculty, and staff information, facilitating processes such as registration, admissions, class and exam scheduling, and student services. The use of ERP also reduces errors in educational processes and strengthens faculty-student interactions. Overall, technology acceptance, particularly ERP, enhances educational performance and quality.

To test Hypothesis 4, two paths were examined: (1) the effect of ERP utilization in the educational system on technology acceptance and (2) the effect of technology acceptance on educational quality enhancement. The impact of ERP utilization in the educational system on technology acceptance was confirmed with a path coefficient of 0.605 and a t-value of 16.071. Similarly, the impact of technology acceptance on educational quality enhancement was verified with a path coefficient of 0.384 and a t-value of 6.623. Given the results of these two paths within the model, it can be inferred that technology acceptance acts as a mediating variable between ERP utilization in the educational system and educational quality enhancement. Additionally, since the absolute Sobel test statistic (6.123) is greater than 1.96 and the significance level (0.001) is below 0.05, the mediating effect of technology acceptance in the relationship between ERP utilization in the educational system and educational quality enhancement is further confirmed. Consequently, Hypothesis 4 is supported.

By using ERP, administrators can easily monitor the performance of students and faculty and take necessary actions when required. This leads to an overall improvement in educational quality and learning outcomes. In general, ERP utilization in the educational system accelerates educational quality enhancement and learning efficiency, helping administrators and students optimize planning and resource management.

The findings indicate that ERP implementation in the educational system significantly contributes to educational quality enhancement. By using an ERP system, student information can be stored in a centralized database, making it easily accessible. This allows administrators to make informed decisions to improve educational processes and to monitor academic performance, attendance, and student schedules efficiently. The ERP system enhances administrative processes such as registration, course planning, evaluation, and certification issuance, leading to process efficiency, error reduction, and improved management of the educational system.

With ERP, communication between students, faculty, and administrative staff improves. This system enables centralized and electronic messaging, notifications, and discussions, ensuring timely and accurate information dissemination. Furthermore, ERP provides data analysis and reporting capabilities, allowing educational administrators to enhance institutional performance, identify strengths and weaknesses, and make data-driven strategic decisions.

The results also indicate that ERP utilization in the educational system facilitates technology acceptance in higher education. With ERP, administrators can optimize various educational processes, including student enrollment, course planning, attendance tracking, and student evaluation. ERP enhances transparency in the education system, allowing students and faculty to access course schedules, grades, projects, and academic status online, fostering trust and informed decision-making.

Moreover, ERP improves interactions between students, faculty, and educational administrators by enabling online messaging, file sharing, virtual meetings, and live discussions. ERP utilization enhances productivity in the educational system by reducing time and costs associated with manual processes, allowing administrators to maximize resource efficiency.

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Additionally, the findings suggest that technology acceptance in the educational system directly contributes to educational quality enhancement. As a result, the following recommendations are proposed:

1. Conduct training programs for administrators and faculty on effective use of technology in education. These training sessions should cover educational technologies, technology-based teaching methods, and content design principles using digital tools.
2. Develop and strengthen IT infrastructure, including computer labs, high-speed internet networks, and modern software and hardware facilities, to provide better opportunities for technology integration in education.
3. Develop and implement educational software platforms to facilitate content delivery and student assessment, improve interaction between faculty and students, and provide instant feedback.
4. Encourage collaboration between academic faculty and technology experts to share experiences, develop joint projects, and exchange ideas on innovative educational technologies.
5. Establish evaluation and monitoring systems to measure the impact of technology adoption on educational quality, providing administrators with critical insights for continuous improvement.

This study is a case study limited to higher education institutions in Razavi Khorasan Province. Therefore, generalizing the findings to other higher education institutions should be done with caution. It is recommended that the current research model be tested in different higher education contexts.

Demographic factors presented in the descriptive statistics of this study (such as gender, age, education, and work experience) could be included as control variables in future models. Furthermore, this study used cross-sectional data, and future researchers are encouraged to collect longitudinal data for a more comprehensive analysis of ERP implementation and its long-term effects on educational quality.

Authors' Contributions

All authors significantly contributed to this study.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

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Declaration of Interest

The authors report no conflict of interest.

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Ethical Considerations

In this study, to observe ethical considerations, participants were informed about the goals and importance of the research before the start of the interview and participated in the research with informed consent.

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